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NEW SPECIES OF COLEOPTERA FROM NORTH AMERICA

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CARABIDAE

Feronia (Cryobius) bryanti Van Dyke, new species

Small, narrow and elongate, moderately flattened, black and shining, legs rufous. Head somewhat longer than broad, as wide as apex of prothorax, front smooth, frontal grooves straight and well impressed; mandibles prominent, porrect; eyes moderately prominent; antennae long and delicate, extending backwards beyond base of elytra. Prothorax as broad as long, apex feebly emarginate, sides broadly arcuate in front, obliquely narrowed behind or sometimes feebly sinuate to obtuse hind angles; disc with median longitudinal line finely impressed, anterior transverse impression well defined, posterior transverse impression less evident, basal impressions linear and lunate in front, broad and deep behind, faintly double, basal area quite smooth, hind angles obtuse, base feebly emarginate and without margin. Elytra elongate, slightly cordate, broad at base with humeral angles prominent and well rounded, the sides almost parallel, broadly rounded posteriorly and feebly sinuate towards apex; disc feebly convex, more or less flattened, striae well impressed throughout and practically impunctate, the intervals convex, the third with three foveae. Legs long and delicate. Prosternum not margined apically. Male front tarsi well developed. Length 8.0 mm., breadth 2.75 mm.

Holotype male, allotype female (Nos. 6197 and 6198, California Academy Sciences, Ent.) and one male paratype, all collected by Owen Bryant, at AKLAVIK, MACKENZIE DELTA, NORTHWEST TER-RITORY, Canada, June 16, 1931 (Bryant Lot 233).

This small *Platidius*-like beetle is closely related to *Feronia* blaisdelli Van Dyke (Pan-Pacific Ent., 19(1):24-25. Jan. 1943) but differs principally by having the sides of the prothorax oblique posteriorly and with obtuse hind angles, whereas blaisdelli has the sides of prothorax strongly sinuate posteriorly and the hind angles right-angled; the elytra rather cordate in shape with prominent humeri as against an elliptical afterbody with narrowed and oblique humeri; and well-impressed striae and convex intervals in contrast to the more feebly impressed striae and somewhat flattened intervals. The two species stand well apart from all other American species of the subgenus *Cryobius*.

ELATERIDAE

Athous farallonicus Van Dyke, new species

Elongate, subparallel, moderately convex, upper surface brown, the elytral suture and lateral margin, the underside, legs and antennae somewhat rufous. Head rather coarsely closely punctured, the front deeply triangulately impressed anteriorly, clypeal margin prominent, transverse, eyes large; antennae filiform, reaching in males two segments beyond hind angles of prothorax, in females barely to hind angles, the second segment small, but little longer than broad, the third almost twice as long as second and triangular, the fourth and fifth somewhat more robust, about one-and-a-half times as long as broad and feebly serrate, the sixth to tenth a bit longer, more parallel and gradually narrower and the eleventh elongate fusiform. Prothorax about a sixth longer than broad, apex feebly arcuate, base emarginate, sides sinuate behind, feebly arcuate in front and slightly narrowed at apex, apical angles blunt, not projecting, hind angles acute, without carinae, with sides elevated and extending somewhat backwards, the lateral margins narrow; the disc rather coarsely, not closely punctured except at sides, feebly depressed near front angles, with a median smooth longitudinal line more or less evidently especially posteriorly, without canaliculation, and sparsely clothed with rather coarse, forwardly inclined fulvous pile. Scutellum elongate, rounded at apex, coarsely punctured and setose. Elytra as broad as broadest part of prothorax, two and twothirds as long, with sides quite parallel, the striae well impressed and coarsely punctured, the intervals convex, rugose and with coarse, sparse and inclined pubescence irregularly distributed along them. Beneath rather finely somewhat densely punctured. Legs long and delicate, the second and third tarsal segments of all legs somewhat prolonged beneath and feebly lobed. Length male, 11.0 mm., breadth 3.0 mm.

The female more robust, the antennae shorter and more delicate, the prothorax somewhat broader than long, with disc more convex and the sides more arcurate, and the elytra much more convex and expanded especially behind, giving the afterbody a spatulate appearance.

Holotype male, allotype female (Nos. 6199 and 6200, Calif. Acad. Sci., Ent.) and three paratypes, two males and one female, all collected by Dr. G. Dallas Hanna, during June, 1949, from the FARALLONE ISLANDS, 25 miles west of the Golden Gate, SAN FRAN-CISCO, CALIFORNIA. The five specimens were found on the ground and under cover.

This species is related to *Athous excavatus* (Motschulsky) and because of its brown color, looks more like the subspecies *carmeli* Van Dyke (see table, Proc. Calif. Acad. Sci., 20(9):363, and discussion, pp. 373-374, March 3, 1932). In *excavatus*, the pronotal punctation is somewhat denser, the pubescence finer, longer and gray, the antennae more robust and longer, at least four antennal segments in the males extending beyond the hind prothoracic angles and the tarsal lobes a bit more pronounced. In most of the typical *excavatus* and many of the subspecies *carmeli* the sides of the prothorax are rufous, which is not the case with *farallonicus*.

BUPRESTIDAE

Acmaeodera boharti Van Dyke, new species

Rather small, moderately short and compact, the head and pronotum black or feebly aeneous and finely pilose, the head with white pile, the pronotum with erect black pile, the elytra a deep bluishblack, the under surfaces aeneous, and the insect as a whole somewhat shining and without maculations of any kind. Head coarsely, densely punctured, the front longitudinally impressed, transversely impressed at base of clypeus and the latter semicircularly emarginate in front; antennae short, reaching just beyond middle of prothorax, segments 5 to 10 serrate, the eleventh elliptical. Prothorax about twice as wide as long, apex feebly biemarginate, base transverse, sides unevenly arcuate and gradually narrowed from base to apex, the disc convex, coarsely, cribrately punctured laterally and rather finely, less densely punctured centrally, with a small feeble impression near center of front margin and a deeper one in front of scutellum, the lateral margin narrow but distinct though concealed when viewed dorsally. Elytra at base barely wider than base of prothorax, twice as long as broad, sides feebly sinuate in front of middle but in general gradually narrowed and convergent posteriorly to the rounded apex, the side margin serrate from middle to apex, the disc convex, somewhat flattened medially, the humeral umbone distinct, the striae finely, sharply impressed and finely closely punctured towards the suture, but outwardly very coarsely punctured except for the ninth and tenth striae which are very deeply impressed but less coarsely punctured, the inner intervals flattened and about twice as wide as the striae, becoming narrower and more irregular outwardly as the punctures increase in size, and with the last three more regular, very convex and rugose, each interval in addition with a single row of fine punctures from which arise a row of inclined white setae. Ventral surface shining, coarsely punctured in front and gradually more finely and sparsely punctured posteriorly and sparsely clothed with short, white pile. Prosternum with the front margin sinuate. The last ventral segment without a transverse lobe-like plate before apex. Length 8.0 mm., breadth 3.0 mm.

Holotype (No. 6201, Calif. Acad. Sci., Ent.), a unique collected at Ensenada Honda, Puerto Rico, West Indies, Aug. 20, 1942, by George E. Bohart.

This very distinct species is like no other described species from the West Indies, nor in fact like any from North America.

Chrysobothris sinaloae Van Dyke, new species

Of moderate size, chocolate brown in color and bronzed, somewhat narrow and elongate, and simulating C. distincta Laporte and Gory in general appearance. The clypeus broadly shallowly and feebly angulately emarginate with the outer angles of the emargination rounded, the antennae short, with the outer eight segments serrate and gradually narrowed towards the apex. Prothorax two-fifths broader than long, apex very feebly bisinuate, the base strongly so with the median lobe prominent, the disc somewhat convex, densely punctured, the punctures well separated centrally but approximate at sides and more or less arranged into transverse rugae, a slight median longitudinal impression generally reaching the apex but well separated from base, and the sides quite parallel in basal twothirds, rounded in front and obliquely convergent to apex. Elytra three times length of prothorax, slightly broader at base than prothorax, humeri prominent, sides quite parallel or feebly sinuate for basal two-thirds, thence gradually narrowed towards apex and rounded to a blunt apex, the lateral margin serrate posteriorly and the disc feebly convex with three well-developed carinae, the sutural one straight and extending forwards two-thirds of the way towards the base, the second sinuate and extending forward from apex to beyond the middle and more or less paralleling the sutural, and the third or outermost, short, feebly arcuate and running from the posterior fovea toward the humeral umbone but generally not reaching it but turning outwardly, the general surface densely punctured especially toward the sides, with a deep fovea to the outer side of the scutellum, a feebly impression between that and the umbone and three well-defined, very densely punctured and somewhat cupreous foveae, the inner one about one-third the distance from the apex and to the outer side of the sutural carina, the second slightly forward of this, to the outer side of the second carina and at the apex of the short third carina, and the third fovea, about a third the distance from the base and straddling the apex of the second carina. The ventral surface bronzed and shining, the tarsi generally greenish, the ventral sclerites rather deeply sulcate medially, somewhat coarsely punctured, the abdomen strigate and clothed with a fine, white pile. In addition each sclerite has an elongate callosity at the side and the margin of the last ventral is finely serrate. The anterior femora have a well-marked tooth, serrate along the outer margin. Length 13 to 16 mm., breadth 5 to 6 mm.

Males with front flattened, densely, finely punctured, bright green, with a dense fine white pile; the antennae green, the front tibiae gradually dilated beneath at the apex, the last ventral segment broadly emarginate, the base of the emargination transverse or feebly sinuous, and the undersurface clothed with white pile, especially evident on the prosternum.

Females with front feebly convex, more coarsely punctured than in the male and rugose, with the pile sparser, both front and antennae bronzed, the front tibiae feebly arcuate and enlarged outwardly but without apical dilation and the last ventral segments with a small notch at the apex.

Holotype male, allotype female (Nos. 6202 and 6203 Calif. Acad. Sci., Ent.) and 12 paratypes, collected at MORCORITO, SIN-ALOA, MEXICO, Sept. 18, 1947, by Joseph Marquis. Three other specimens collected at Los Mochis, Sinaloa, on Nov. 15, 1947, were also taken by Mr. Marquis.

This species from the west coast of Mexico superficially looks like the larger and more distinctly sculptured *distincta* Laporte and Gory from the interior of Mexico and the smaller and shorter *schaefferi* Obenberger from Lower California, but both these in the male have a very distinct tooth near the apex of the front tibiae whereas in *sinaloae* the front tibiae in the males has only a sudden enlargement near the apex. According to Fisher's table (1942, U. S. Dept. Agric., Misc. Publ. No. 470), it would run close to *peninsularis* Schaeffer from Lower California but it differs from this by being larger, with a much broader prothorax, the males with a green forehead and the front tibiae with the apical enlargement a simple dilatation with at most a small tooth inwards whereas in *peninsularis* the forehead is bronzed and the front tibiae with a prominent tooth at the base of the enlargement.

CURCULIONIDAE.

Eupagoderes bryanti Van Dyke, new species

Rather small, short and compact; clothed above with light brown and white scales irregularly distributed and closely applied in a tesselated manner; the head, a broad band at sides of prothorax and the underside with white scales, in close contact on the head and feebly imbricated at sides of prothorax and beneath; a band of brown scales on either side of the middle of pronotum and the hind femora barred. Head convex, a well-marked transverse impression separating it from the rostrum, the latter distinctly trisulcate, the median sulcus ending at the transverse impression and the lateral short but linear. Prothorax one-sixth broader than long, the sides arcuate, narrowing in front, almost parallel in posterior two-thirds, the disc with a few coarse punctures and numerous small ones but these latter are in most cases concealed by the dense scaly vestiture. Elytra cordiform, but little broader at base than base of prothorax, and almost a third longer than broad; disc evenly convex, the striae finely impressed and finely regularly punctured, the intervals feebly elevated centrally and with a row of minute punctures down their center from which arise very short curved setae. Legs robust, apices of hind tibiae obliquely truncate, the third tarsal segment enlarged and lobed. Length 8.5 mm., breadth 4.0 mm.

Holotype (No. 6204, Calif. Acad. Sci., Ent.) and 16 paratypes, collected in the BABOQUIVARI MOUNTAINS, ARIZONA, Sept. 23, 1933, by Owen Bryant.

This species along with halli Van Dyke and huachucae Van Dyke forms a small group of related species characterized by being of medium size, compact, with the rostrum trisulcate, the median sulcus not extending above the transverse impression, a maculate design, and the upper surface densely clothed with scales arranged in a definite tesselated or pavement manner. In halli the anterior tibiae are not serrate beneath, the head is flattened or but feebly convex with the result that the rostrum is not distinctly limited above by a transverse impression, the elytral striae sharply defined and the scales either black or white giving the beetle a gray appearance. Since the original description of halli based on five specimens was published, we have received 23 additional specimens all more or less uniform as to color and general appearance. In bryanti, a species of the same size and shape as the above, the anterior tibiae are serrate beneath, the scales are brown and white, the head feebly convex thus definitely limiting the rostrum above, and the elytral striae vaguely indicated, defined more by the row of strial punctures than the impressed striae. The pronotum is also so densely clothed with scales, more or less imbricated, that the coarse punctures are concealed which is not the case in either halli or huachucae where the scales are tesselated and numerous large punctures are exposed. Placed side by side the black and white scales of halli strongly contrast with the brown and white scales of bryanti.

Tosastes columbianus Van Dyke, new species

Black, densely clothed with imbricated scales, gray beneath, and gray above maculated with dark brown as follows: a broad band, narrowed on occiput, extending down the middle of the head and rostrum, another down the middle of pronotum, sometimes expanded so as to cover the entire disc, and irregular patches, often ocellate scattered over the elytra. *Head* slightly convex, separated from the rostrum by a feeble transverse impression, the rostrum broad, a bit longer than wide, somewhat flattened above in basal area and with the apex well arched; eyes of moderate size and quite flattened. *Prothorax* about one-third broader than long, sides feebly arcuate at middle, obliquely narrowed in front and quite straight and parallel behind, the disc coarsely, densely punctured and generally with a faint median longitudinal groove. *Elytra* oval, a bit broader at base than base of prothorax, broadest at middle, the disc convex, the striae well impressed and quite coarsely, regularly punctured, the intervals convex and ornamented with an irregular double row of short, hooked setae. Legs stout, the hind tibiae subtruncate and with a double row of spines. Length 4.5 mm., breadth 3 mm.

Holotype (No. 6205, Calif. Acad. Sci., Ent.) and four paratypes collected at KAMLOOPS, BRITISH COLUMBIA, May 1, 1932, by Owen Bryant.

This small species structurally belongs near *Tosastes cinarescens* Pierce and superficially resembles some of the smaller, more irregularly maculate specimens. It differs, however, by having a narrower prothorax which is also more deeply and closely punctured, a head which is definitely convex, not flattened, a rostrum which is quite convex and depressed apically and with eyes which are more flattened.

Crocidema arizonica Van Dyke, new species

Elongate, dark brown, densely clothed with brownish or opalescent scales and with rather stiff hairs varying in degree from sparse to rather dense. Head as long as prothorax, the front moderately convex, with a well marked transverse impression between it and the arcuate beak, sparsely punctured, the punctures mostly concealed by the scales, and with semierect stiff pile, the rostrum narrower than interocular area in male, about as broad in female, quadrate; eyes large but quite flattened, projecting but little beyond side of head, the scrobes deep, not reaching eyes but curved beneath in front of eyes. Prothorax slightly broader than long in the male and considerably broader in the female, front margin feebly arcuate, transverse base, the sides arcuate, the disc rather densely punctured though the punctures are concealed by the scales and the post-ocular lobes are evident but not prominent. Elytra two and two-thirds times length of prothorax, elongate elliptical in the male, broader and slightly cordate in female, disc somewhat flattened, declivity rounded, the striae well impressed especially at sides and rather deeply punctured with rounded closely placed punctures, the intervals flat, very finely punctured and with the stiff pile irregularly distributed. The underside finely punctured and sparsely pubescent. Length male holotype 10.0 mm., breadth 3.5 mm., female allotype, length 11.0 mm., breadth 4.0 mm.

Holotype male, allotype female (Nos. 6206 and 6207, Calif. Acad. Sci., Ent) and six designated paratypes collected by Owen Bryant in the SANTA CATALINA MOUNTAINS, ARIZONA, the first July 15, 1938 (Lot 21), the second June 20, 1933, the others on July 15, 1938. I have associated with these various specimens from the Chiricahua Mountains and Santa Rita Mountains of Arizona, also one specimen from the Chisos Mountains of West Texas.

This species is rather closely related to attenuata Van Dyke (Pan-

Pacific Ent., 10(4):186-187, 1934) but differs by being generally larger and more robust, the scales more opalescent, the eyes less prominent, flatter, the funicular segments of antennae very similar in breadth whereas gradually wider apically in *attenuata* and the elytral striae generally deeper and the punctures coarser.

Peritaxia longipennis Van Dyke, new species

Rather large for the genus, narrow, elongate, black, antennae and tarsi rufopiceous, densely clothed with very closely applied scales which appear of the general body color though they are somewhat opalescent under good light and high magnification, and are arranged in a tesselated manner, and sparsely pilose, the pile semierect and denser on head and elytral declivity. Head one-third longer than prothorax, convex above, feebly flattened in front, finely punctured behind, coarsely punctured in front, distinctly separated from rostrum by a rather deep transverse impression; the rostrum broad, feebly arcuate, coarsely, densely punctured, wider in front and triangulately emarginate apically; the antennae with scape long and clavate, the funicle with the first and second segments twice as long as broad, segments 3 to 7 slightly longer than broad, the terminal segment long and fusiform, almost equal in length to the three preceding segments; the eyes feebly convex and moderately prominent. Prothorax two and one-half times as broad as long, base and apex transverse, sides evenly and moderately arcuate, disc feebly convex, finely granular in appearance as a result of the scales, with a well-impressed narrow line medially, and a moderate number of coarse, well-spaced punctures but coarsely punctured and rugose laterally. Elytra two and a half times as long as prothorax and about one-fifth longer than broad; base feebly emarginate, basal angles right angled though feeble, disc convex, the declivity abrupt, almost perpendicular, the striae well defined by the coarse, closely placed punctures, the intervals almost twice as wide as striae and feebly convex. Ventral surface rather finely, densely punctured and sparsely pubescent. Length 9.0 mm., width 4.0 mm.

Holotype (No. 6208, Calif. Acad. Sci., Ent.) and one paratype collected in OAK CREEK CANYON (south of Flagstaff), ARIZONA, July 25, 1936, by Owen Bryant.

This species when compared with larger specimens of *rugicollis* Horn appears generally narrower and more elongate, the pronotum less markedly rugose, the elytra much longer and elliptical with humeri angles small, not somewhat cordate and pronounced, and the strial punctures more numerous and rounded. Other described species are generally smaller, proportionally shorter, with the pronotum more rugose, the elytra more cordate in shape and with prominent humeral angles.

Onychobaris langei Van Dyke, new species

Elongate oval, convex, subopaque, the general surface alutaceous, black, the legs piceous or sometimes feebly rufous, setae very minute and inconspicuous. Head sparsely, finely punctured, sometimes with a small fovea at base of rostrum, the rostrum about 1.5 mm. long, evenly arcuate, of moderate robustness, rather coarsely punctured towards base and finely towards apex. Prothorax robust, slightly broader than long, with sides evenly arcuate, the apex constricted, the base broadly bisinuate, the median lobe wide and prominent, the disc rather coarsely, densely punctured, the punctures contiguous laterally, and with a well marked median smooth line. Scutellum transverse and feebly impressed at center. Elytra almost a third longer than broad with rather prominent humeri which make the elytra wider there than the base of the prothorax, with sides feebly convergent posteriorly, well-rounded at apex, the disc with coarse, deep and abrupt striae, the intervals flat, equal, distinctly wider than striae, each with a single series of well-impressed rounded, contiguous punctures. Beneath coarsely, closely punctured laterally, more finely and sparsely at center of abdomen. Length 5.0 mm. excluding beak, breadth 2.5 mm.

Holotype (No. 6209, Calif. Acad Sci., Ent.) and seven paratypes collected by Dr. W. H. Lange at EL SEGUNDO, LOS ANGELES Co., CALIFORNIA, September 28, 1938. They were found on Oenothera spiralis, close to the roots. Four specimens were returned to Dr. Lange.

The species, according to Colonel Casey's key (Col. Notices IV, 1892, pp. 522-524), runs close to molesta Casey from Arizona, but aside from locality, differs by having dense approximate pronotal punctures, confluent at sides, a very much more distinct median smooth line on disc, a less robust rostrum, a subopaque or duller appearance, and piceous instead of red legs.

DEROBRACHUS GEMINATUS ON GRAPE ROOTS (Coleoptera: Cerambycidae)

Larvae of Derobrachus geminatus Leconte were found feeding on grape root stock near Indio, California, August 30, 1950, by Mr. B. Laflin. The land had been cleared for about one year. Formerly it had been covered by mesquite (Prosopis glandulosa Ckll.), a natural host of the beetle. Mr. Laflin tells me he has found four other such cases. I am indebted to Dr. E. C. Van Dyke for identifying the specimens.-Sherman L. Thomas, Indio, California.